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CLAIMS

[Utility model registration claim]

[Claim 1] many -- the yoke section constituted by carrying out the laminating of the steel plate of several sheets -- many -- the thing which the end face is joined to the plane of composition of the aforementioned yoke section, makes the teeth section constituted by carrying out the laminating of the steel plate of several sheets, and comes to attach it -- it is it is and they are constituted in either the end face of the aforementioned teeth section, or the planes of composition of the yoke section -- many -- the stator core of the rotation electrical machinery characterized by forming the fitting crevice where the aforementioned heights fit into another side while making some steel plates of the steel plates of several sheets project partially and forming heights

[Translation done.]

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DETAILED DESCRIPTION

[Detailed explanation of a design]

[0001]

[Industrial Application]

this design -- many -- the yoke section constituted by carrying out the laminating of the steel plate of several sheets -- many -- it is related with the stator core of the rotation electrical machinery which attached the teeth section constituted by carrying out the laminating of the steel plate of several sheets

[0002]

[Description of the Prior Art]

Conventionally, as a stator core of a motor, there is a thing which was attached in the rectangle frame-like yoke section and the inner circumference section of this yoke section and which consist of the four teeth sections, for example. The conventional composition of this kind of stator core is shown in drawing 4.

[0003]

namely, the yoke section 1 -- many -- the laminating of the steel plate of several sheets is carried out, and it fixes, and is constituted, and the shape of a rectangle frame which had a radius of circle in the corner is made on the other hand -- the teeth section 2 -- the same -- many -- although the laminating of the steel plate of several sheets is carried out, it fixes and it is constituted, the four teeth sections 2 are connected by the bridge section 3 narrow at inner circumference flank grade in one, and let them be the connection teeth sections 4 here Let circle configuration space of the inner circumference section of this connection teeth section 4 be the field space where the rotator which is not illustrated is arranged.

[0004]

The aforementioned connection teeth section 4 is in the state where each teeth section 2 was equipped with the coil which is not illustrated, respectively, and is attached in the interior of the yoke section 1 by pressing fit, it has and a stator is constituted. In this case, slot 1a prolonged in the thickness direction (the direction of a laminating) is formed, and as the connection teeth section 4 inserts the edge of each teeth section 2 in these slot 1a from the upper part drawing, it is pressed fit in the inside side center-section grade of each **** of the yoke section 1.

[0005]

[Problem(s) to be Solved by the Device]

however, slot 1a formed in the yoke section 1 in the above-mentioned conventional thing -- the thickness direction -- being prolonged -- vertical both sides of the yoke section 1 -- opening -- since it was composition the bottom, when the teeth section 2 was inserted in slot 1a in the thickness direction, positioning of the thickness direction to the yoke section 1 of the teeth section 2 might not be easy, and the position gap might arise in the thickness direction among both

[0006]

Therefore, the purpose of this design is in some which attached the teeth section in the yoke section, and it is to offer the stator core of the rotation electrical machinery which can attach the teeth section, without the position gap between the yoke sections arising.

[0007]

[Means for Solving the Problem]

the stator core of the rotation electrical machinery of this design -- many -- the steel plate of several sheets in the yoke section constituted by carrying out a laminating It is the thing which the end face is joined to the plane of composition of the aforementioned yoke section, makes the teeth section constituted by carrying out the laminating of the steel plate of several sheets, and comes to attach it. many -- they are constituted in either the end face of the aforementioned teeth section, or the planes of composition of the yoke section -- many -- while making some steel plates of the steel plates of several sheets project partially and forming heights, it has the feature at the place in which the fitting crevice where the aforementioned heights fit into another side was formed

[0008]

[Function]

According to the above-mentioned means, although it is attached after the end face has joined the teeth section to the plane of composition of the yoke section, heights and a fitting crevice come to fit in mutually at this time. in this case, the laminating of the heights is carried out -- many -- since some steel plates of the steel plates of several sheets are made to project partially and it is formed, the teeth section and the yoke section come to be made the state where it lapped in the direction of a laminating partly by fitting, with heights and a fitting crevice

[0009]

Therefore, it will be in the state where the teeth section and the yoke section were positioned in the direction of a laminating of a steel plate, by fitting with heights and a fitting crevice, consequently the teeth section can be attached in the state where there is no position gap to the yoke section.

[0010]

[Example]

The 1st example of this design is described with reference to drawing 1 below. drawing -- setting -- 11 -- the yoke section -- it is -- this -- many -- the caulking combination of the silicon steel of several sheets is changed into a laminating state, it is constituted, and the shape of a rectangle frame which had a radius of circle in the corner is made

[0011]

And the fitting crevice slack fitting hole 12 penetrates each **** in each center section of the neighborhood section of this yoke section 11 crosswise, and is formed in it. In this case, the blanking steel plate 13 with which the yoke section 11 was pierced in the shape of a rectangle frame, It consists of a blanking steel plate 14 of the **** configuration which excised each center section of the neighborhood section of this blanking steel plate 13 with predetermined width of face (it is abbreviation coincidence to the width of face of the teeth section mentioned later). Among these, it is formed by arranging the blanking steel plate 14 of two or more sheets to pars intermedia, and arranging the blanking steel plate 13 of the shape of a rectangle frame of two or more sheets on the vertical both sides, respectively.

[0012]

on the other hand -- 15 -- the teeth section -- it is -- this -- many -- the caulking combination of the silicon steel of several sheets is changed into a laminating state, it is constituted, and the configuration with magnetic pole section 15b of an approximate circle arc is made at one to the point of coil applied-part 15a equipped with the coil which is not illustrated As end-face 15c of coil applied-part 15a is joined to the inner skin (plane of composition) of the aforementioned yoke section 11, this teeth section 15 is attached in the yoke section 11 so that it may mention later.

[0013]

And it is located in the thickness direction pars intermedia of end-face 15c, and heights 16 are formed in this teeth section 15. In this case, by forming some steel plates arranged at the pars intermedia of the steel plates which constitute the teeth section 15 for a long time by the width-of-face size of the aforementioned yoke section 11 rather than original coil applied-part 15a, from end-face 15c, as heights 16 project, they are formed, and let them be the size which fits into the aforementioned fitting hole 12.

[0014]

Thus, the constituted teeth section 15 is in the state where it was equipped with the coil which is not illustrated to coil applied-part 15a, four pieces are attached in the center section of each **** of the yoke section 11 in this case, respectively, and a stator core consists of these yokes section 11 and the four teeth sections 15. At this time, each teeth section 15 is pressed fit in the direction of arrow A using the pressing fixture which is not illustrated, and it has it, and it is attached in the state where end-face 15c joined to the plane-of-composition slack inner skin of the yoke section 11 so that heights 16 may fit into the aforementioned fitting hole 12 of the yoke section 11. Moreover, in this state, vertical both sides of the yoke section 11 and vertical both sides of the teeth section 15 are made into a flat-tapped state, respectively.

[0015]

according to the above-mentioned composition, heights 16 constitute the teeth section 15 -- many -- since some steel plates of the steel plates of several sheets are made to project partially and it is formed, the teeth section 15 and the yoke section 11 come to be made the state where it lapped in the direction of a laminating partly by fitting, with heights 16 and the fitting hole 12

[0016]

Therefore, it will be in the state where the teeth section 15 and the yoke section 11 were positioned in the direction of a laminating of a steel plate, by fitting with heights 16 and the fitting hole 12, consequently positioning of the thickness direction to the yoke section 1 of the teeth section 2 is not easy, and, unlike the conventional thing which the position gap might produce in the thickness direction among both, the teeth section 15 can be certainly attached in the state where there is no position gap to the yoke section

[0017]

Moreover, in the conventional thing shown in drawing 4 in this case, since it was the composition pressed fit from the upper part in pressing the connection teeth section 4 fit, there was a possibility of the part which arranges a pressing fixture having been limited and damaging a coil. On the other hand, in this example, the advantage that it can prevent that the flexibility of the part which arranges a pressing fixture damages increase and a coil is also acquired for the composition which presses the teeth section 15 fit from arrow A (longitudinal direction).

[0018]

In drawing of the yoke section 21, a place which drawing 2 shows the 2nd example of this design, and is different from the 1st example of the above forms in the Johan section the fitting crevice 22 opened also up, and is the point of the teeth section 23 which formed heights 24 in the Johan section too. According to this 2nd example, the same effect as the 1st example of the above can be acquired, and it also becomes possible further to press the teeth section 23 fit from the upper part.

[0019]

Drawing 3 shows the 3rd example of this design. It is made to form the fitting crevice 32 in the yoke section 31 in this example only at an inner skin (plane of composition) side at the Johan section of the direction of a laminating. Since it becomes the shape of a frame with which the whole was connected like what is located in the bottom half section, what is located in the Johan section by this composition among the blanking steel plates which constitute the yoke section 31 can constitute the yoke section 31 more easily compared with the case of the two above-mentioned examples.

[0020]

Moreover, as compared with what divided one pole of four teeth sections 33 at a time, assembly work can be done easy by connecting the four teeth sections 33 by the bridge section 34, and constituting the connection teeth section 35.

[0021]

In addition, change various by within the limits which does not deviate from a summary -- it is not limited to each example which described above and was shown in the drawing, and heights are formed in a yoke section side, you may make it form a crevice in a teeth section side, and the yoke section may be constituted from two or more division objects -- is possible for this design.

[0022]

[Effect of the Device]

According to the stator core of the rotation electrical machinery of this design, so that clearly [in the above explanation] they are constituted in either the end face of the teeth section, or the planes of composition of the yoke section -- many, while making some steel plates of the steel plates of several sheets project partially and forming heights Since the fitting crevice where the aforementioned heights fit into another side was formed, the outstanding effect that the teeth section can be attached is done so, without the position gap between the yoke sections arising.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The decomposition perspective diagram of the important section of a stator core showing the 1st example of this design

[Drawing 2] The decomposition perspective diagram of the important section of a stator core showing the 2nd example of this design

[Drawing 3] The decomposition perspective diagram of the important section of a stator core showing the 3rd example of this design

[Drawing 4] The decomposition perspective diagram of a stator core showing the conventional example

[Description of Notations]

the inside of a drawing, and 11, 21 and 31 -- the yoke section and 12 -- in the teeth section and 15c, an end face, and 16 and 24 show 22 and heights and 32 show [a blanking steel plate, and 15 23 and 33 / a fitting hole (fitting crevice), and 13 and 14] a fitting crevice

[Translation done.]

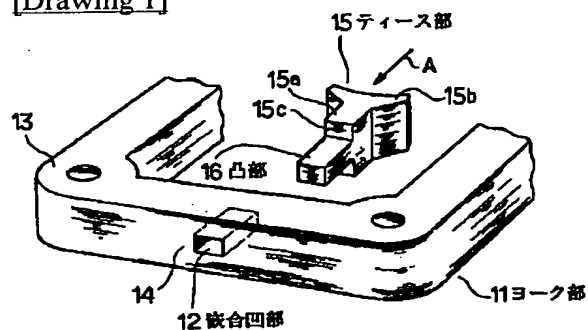
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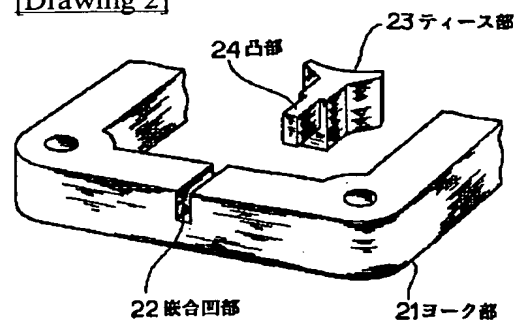
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DRAWINGS

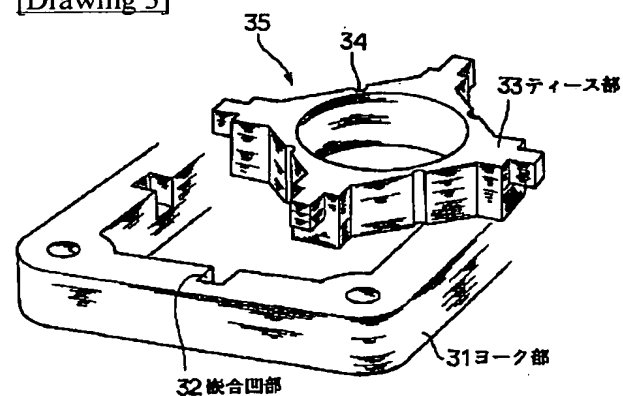
[Drawing 1]



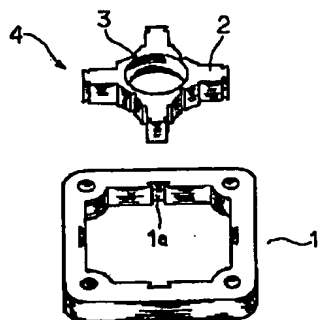
[Drawing 2]



[Drawing 3]



[Drawing 4]



[Translation done.]